| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/613,655 | 07/02/2003 | Masanori Asakura | 81710.0254 | 7235 |

| | |
|---|---|
| 26021        7590        01/24/2008<br>HOGAN & HARTSON L.L.P.<br>1999 AVENUE OF THE STARS<br>SUITE 1400<br>LOS ANGELES, CA 90067 | **EXAMINER**<br>VO, QUANG N |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2625 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 01/24/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/613,655 | ASAKURA, MASANORI |
| | Examiner | Art Unit | |
| | Quang N. Vo | 2625 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>19 November 2007</u>.

2a)☒ This action is **FINAL**.  2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

Applicant's argument filed on 11/19/2007 has been considered but is not persuasive.

Applicant argues that Terada does not teach of any counting or comparison after pixels are determined to be isolated dots. This argument is not persuasive because Terada discloses this limitation (e.g., if the different in colors between the noticed pixel (isolated points) and the peripheral pixel exceeds a predetermined threshold value, the pixel number of pixels which are detected as such is counted, column 21, lines 53-58).

Applicant argues that Terada does not teach or suggest a threshold value set at different values according to an image resolution. This argument is not persuasive because Terada discloses this limitation (e.g., the amounts of size characteristics of the region are respectively compared to predetermined threshold values which were set beforehand, and a determination is made as to whether the amounts satisfy the predetermined conditions, column 15, line 64 - column 16, line 15).

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Terada et al. (Terada) (US 6,873,436).

With regard to claim 1, Terada discloses an image processing device (e.g., image processing device, column 1, lines 9-13) comprising: an isolated point detecting unit that detects isolated points from image data (e.g., in a peripheral five by five pixel region of the detected noticed pixel (detecting isolated points), column 21, lines 50-53); a counting unit that counts the isolated points detected by the isolated point detecting unit (e.g., if the different in colors between the noticed pixel (isolated points) and the peripheral pixel exceeds a predetermined threshold value, the pixel number of pixels which are detected as such is counted, column 21, lines 53-58); and an isolated point eliminating unit which eliminates the isolated points from the image data when a number of the counted isolated points reaches a threshold value or less (e.g., if the counted number of pixels is smaller than the predetermined threshold value, the pixels are determined as isolated dots, i.e., noise or dot components, and thereby eliminated, column 21, 58-61).

With regard to claim 2, Terada discloses wherein the threshold value is set at different values according to an image resolution (e.g., the amounts of size

characteristics of the region are respectively compared to predetermined

threshold values which were set beforehand, and a determination is made as to

whether the amounts satisfy the predetermined conditions, column 15, line 64 -

column 16, line 15; column 9, lines 32-44).

With regard to claim 3, Terada discloses wherein the image data is divided

into several sections (column 8, lines 34-48), and the isolated points are counted

for each of the sections, and when the counted value reaches the threshold value

or less for each of the sections respectively, the isolated points are eliminated

from the image data in the section (column 9, lines 32-44; column 21, lines 50-

61).

With regard to claim 4, Terada discloses wherein the image data is divided

into sections as the resolution of the image data becomes higher.   (e.g., level K

has more lines in sub-scanning direction than lower level K+1, figure 8).

With regard to claim 5, the subject matter is similar to claim 1. Therefore

claim 5 is rejected as set forth above for claim 1.

With regard to claim 6, the subject matter is similar to claim 2. Therefore

claim 6 is rejected as set forth above for claim 2.

With regard to claim 7, the subject matter is similar to claim 1. Therefore

claim 7 is rejected as set forth above for claim 1.

With regard to claim 8, the subject matter is similar to claim 2. Therefore

claim 8 is rejected as set forth above for claim 2.

With regard to claim 9, the subject matter is similar to claim 3. Therefore

claim 9 is rejected as set forth above for claim 3.

With regard to claim 10, the subject matter is similar to claim 4. Therefore

claim 10 is rejected as set forth above for claim 4.

Referring to claim 11:

Claim 11 is the method claim corresponding to operation of the device in

claim 1 with method steps corresponding directly to the function of device

elements in claim 1. Therefore claim 11 is rejected as set forth above for claim 1.

Referring to claim 12:

Claim 12 is the method claim corresponding to operation of the device in

claim 3 with method steps corresponding directly to the function of device

elements in claim 3. Therefore claim 12 is rejected as set forth above for claim 3.

With regard to claim 13, Terada discloses an image processing method

(column 1, lines 9-13) comprising: dividing image data into several sections (e.g.,

character region, pattern region, and flat color region, column 8, lines 34-48);

detecting isolated points in the image data for each of the divided sections (e.g.,

in a peripheral five by five pixel region of the detected noticed pixel (detecting

isolated points), column 21, lines 50-53); counting a number of the detected

isolated points for each of the divided sections (e.g., if the different in colors

between the noticed pixel (isolated points) and the peripheral pixel exceeds a

predetermined threshold value, the pixel number of pixels which are detected as

such is counted, column 21, lines 53-58); and eliminating the isolated points from

the image data for a section when the counted number of the isolated points

reaches a threshold value or less for each of the divided sections (e.g., if the

counted number of pixels is smaller than the predetermined threshold value, the

pixels are determined as isolated dots, i.e., noise or dot components, and

thereby eliminated, column 21, 58-61).

With regard to claim 14, Terada discloses further comprising: determining

an image resolution of the image data (e.g., an input image which has been read

at a resolution determined in advance, column 2, lines 5-12); determining a

number of sections to divide the image data according to the image resolution;

and dividing the image data into the determined number of sections (column 2,

lines 32-38).

With regard to claim 15, Terada discloses further comprising means for

storing the threshold value (e.g., pixels stored in image storing means compared

to threshold value, therefore threshold value must store in there to be able to

compare, column 12, lines 45-49).

With regard to claim 16, Terada discloses further comprising a register to

store the threshold value (e.g., pixels stored in image storing means compared to

threshold value, therefore threshold value must store in there to be able to

compare, column 12, lines 45-49).

With regard to claim 17, Terada discloses wherein the image data is

divided into several sections (column 2, lines 32-38).

With regard to claim 18, Terada discloses wherein the threshold value is

stored in the register according to the image resolution (column 9, lines 32-44).

With regard to claim 19, Terada discloses further comprising storing the

threshold value (e.g., pixels stored in image storing means compared to

threshold value, therefore threshold value must store in there to be able to compare, column 12, lines 45-49).

With regard to claim 20, Terada discloses further comprising storing the threshold value (e.g., pixels stored in image storing means compared to threshold value, therefore threshold value must store in there to be able to compare, column 12, lines 45-49).

### Conclusion

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
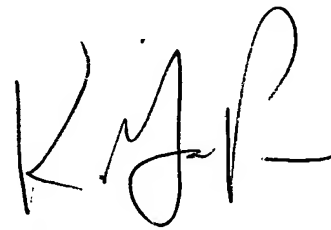
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Vo whose telephone number is 5712701121. The examiner can normally be reached on 7:30AM-5:00PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Y. Poon can be reached on 5712727440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Quang N. Vo      1/7/08
Patent Examiner

KING Y. POON
SUPERVISORY PATENT EXAMINER